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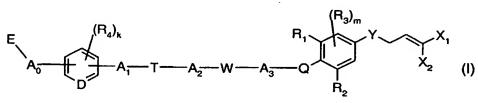
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(57) Abstract: Compounds of formula (I) wherein A₀ is a bond or a C₁-C₆alkylene bridge; A₁, A₂ and A₃ are a C₁-C₆alkylene bridge; D is CH or N; W is, for example, O, S, SO, SO₂, -C(=O)-O- or -O-C(=O)-; T is a bond or, for example, O, NH, S, SO or SR₂; Q is, for example, O, S, SO or SO₂; Y is, for example, O, S, SO or SO₂; X₁ and X₂ are each independently of the other fluorine, chlorine or bromine; R₁, R₂ and R₃ are, for example, H, halogen, OH, SH, CN or nitro; R₄ is, for example, H, halogen, OH, SH, CN, nitro or C1-C6alkyl; R5 is, for example, H, CN, OH, C1-C6alkyl or C3-C8cycloalkyl; k is 1, 2 or 3 when D is nitrogen; or is 1, 2, 3 or 4 when D is CH; m is 1 or 2; E is heteroaryl which is unsubstituted or substituted - depending upon the substitutions possible on the ring - by from one to four identical or different substituents selected from R₁₀; and R₁₀ is, for example, halogen, CN, NO₂, OH, SH or C1-C6alkyl; and, where applicable, their possible E/Z isomers, E/Z isomeric mixtures and/or tautomers, in each case in free form or in salt form, a process for the preparation of those compounds and their use, pesticidal compositions in which the active ingredient has been selected from those compounds or an agrochemically acceptable salt thereof, a process for the preparation of those compositions and their use, plant propagation material treated with those compositions, and a method of controlling pests.



INTERNATIONAL SEARCH REPORT



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A01N43/80

C07D261/10 A01N43/56

C07D277/24 A01N43/653

Relevant to claim No.

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B. FIELDS SEARCHED

Category °

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07D A01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

Citation of document, with Indication, where appropriate, of the relevant passages

EPO-Internal, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

X	WO 96/04228 A (SUMITOMO CHEMICA 15 February 1996 (1996-02-15) claims 1-92	1-7	
Υ	WO 97/27173 A (SUMITOMO CHEMICA 31 July 1997 (1997-07-31) claims 1-28	1-7	
P,Y	WO 03/042147 A (BAYER CROPSCIES 22 May 2003 (2003-05-22) claims 1-27	1–7	
E	WO 2004/002943 A (SYNGENTA PAR AG) 8 January 2004 (2004-01-08 claims 1-8		1–7
X Furti	her documents are listed in the continuation of box C.	Patent family members are listed	In annex.
° Special ca *A* docume consid *E* earlier of filing d *L* docume which citation *O* docume other r *P* docume later th	ent defining the general state of the art which is not defining the general state of the art which is not dered to be of particular relevance document but published on or after the International date and the state of another is cited to establish the publication date of another in or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filling date but nan the priority date claimed	"T" later document published after the inte or priority date and not in conflict with cited to understand the principle or the invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the do "Y" document of particular relevance; the cannot be considered to involve an in document is combined with one or ments, such combination being obvion the art. "&" document member of the same patent Date of mailing of the international see	the application but early underlying the consumer to the considered to current is taken alone laimed invention ventive step when the pre other such docupus to a person skilled family
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Name and n	nalling address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Herz, C	



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		PC1/EP 03/09030
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 96/33160 A (SUMITOMO CHEMICAL COMPANY) 24 October 1996 (1996-10-24) claims 1-80	1-7
Y	WO 96/33160 A (SUMITOMO CHEMICAL COMPANY) 24 October 1996 (1996-10-24) claims 1-80 WO 96/11909 A (SUMITOMO CHEMICAL COMPANY) 25 April 1996 (1996-04-25) claims 1-77	1-7



Internati	A	on No
PCT/EP	037 09	636

					CI/EP	03/09636
Patent d cited in sea	ocument arch report	Publication date		Patent family member(s)		Publication date
WO 960	4228 A	15-02-1996	5 AT	172448	T	15-11-1998
			AU	692894		18-06-1998
			AU	2936995		04-03-1996
			BR	9506309		05-08-1997
			CA	2172709	A1	15-02-1996
			CN	1137265	A ,B	04-12-1996
			CZ	9601296	A3	11-09-1996
			DE	69505490		26-11-1998
			DE	69505490		24-06-1999
			DK	722430		28-06-1999
			EG	20622		31-10-1999
			EP	0722430		24-07-1996
			ES	2124570		01-02-1999
			HU	75028		28-03-1997
			IL IL	114724		01-06-2000
			ΙĹ	126135 126136		29-02-2000 29-02-2000
			MO	9604228		15-02-1996
			JP	8337549 ⁻		24-12-1996
			RU	2144526		20-01-2000
			SK	56896		07-05-1997
			TR	960119		21-06-1996
			ÜS	5872137		16-02-1999
			ZA	9506312		04-03-1996
		21 07 100		1200207		20 00 1007
WO 972	7173 A	31-07-1997	7 AU JP	1399297 9263572		20-08-1997
			WO	9727173		07 - 10-1997 31 - 07-1997
			ZA	9700559		30-07-1997
	40147 4					
MO 030	42147 A	22-05-2003		10155385		28-05-2003
			WO US	03042147 2004029886		22-05-2003
		— — — — — — — — — — — — — — — — — — —				12-02-2004
WO 200	4002943 A	08-01-2004	4 WO	2004002943	A1	08-01-2004
WO 963	3160 A	24-10-1996		5287896		07-11-1996
			DE	69610204		12-10-2000
			DE	69610204		03-05-2001
			EG	20723		29-12-1999
			EP	0824514		25-02-1998
			IL	117943 130542		06-12-2000
			IL JP	9249610		06-12-2000
			WO	9633160		22-09-1997 24-10-1996
			US	6028100		22-02-2000
			US	6214835		10-04-2001
			US	5952386		14-09-1999
			ZA	9602968		22-10-1996
WO 961	1909 A	25-04-1996	6 AT	191477	 Т	15-04-2000
501	~203 N	25 04 1990	AU	692930		18-06-1998
			AU	3672895		06-05-1996
			BR	9509315		26-05-1998
			CA	2202495		25-04-1996
			CN	1318535		24-10-2001
			CIN	1010000	$\boldsymbol{\Lambda}$	74 IO 7001
			CN CZ	1169147		31-12-1997 18-03-1998





Patent document cited in search report	Publication date	Patent famil member(s)	1	Publication date
WO 9611909 A		E 695161	50 D1	11-05-2000
	[E 695161	50 T2	24-08-2000
	E	K 7859	23 T3	31-07-2000
	E	G 216	72 A	27-02-2002
	E	P 07859	23 A1	30-07-1997
	E	S 21453	D1 T3	01-07-2000
		R 30333	11 T3	29-09-2000
	F	IU 770	14 A2	02-03-1998
		L 1155	97 A	26-07-2000
]	L 1306	72 A	16-07-2000
]	L 1306	73 A	26-07-2000
•		L 1306	74 A	16-07-2000
	l	0 96119	09 A1	25-04-1996
		IP 31069	28 B2	06-11-2000
		IP 91511	72 A	10-06-1997
		IP 20003555	32 A	26-12-2000
	(A 104	12 A	04-12-2001
	F	U 21582	50 C2	27-10-2000
		K 450	97 A3	06-05-1998
	(IS 20030738	47 A1	17-04-2003
		IS 60718	51 A	06-06-2000
	Į	IS 62683	13 B1	31-07-2001
		IS 59228	30 A	13-07-1999
		IS 63764		23-04-2002
	7	A 95086	52 A	14-05-1996
	7	R 9603	10 A2	21-06-1996